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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,814	12/18/2001	David L. Graumann	884.603US1	6114

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EXAMINER

GRIER, LAURA A

ART UNIT PAPER NUMBER

2644

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,814

Applicant(s)

GRAUMANN, DAVID L.

Examiner

Laura A Grier

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-25 is/are allowed.
- 6) ☒ Claim(s) 1,5,8 and 11-22 is/are rejected.
- 7) ☒ Claim(s) 2-4,6,7,9 and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/4/02</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 14 recites the limitation "the microphone array" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. **Claims 1 and 5** are rejected under 35 U.S.C. 102(b) as being anticipated by Terui et al.
U. S. Patent No. 5903871.

Regarding claim 1, Terui et al. (herein, Terui) discloses a voice recording and/or reproducing apparatus. Terui's voice recording and reproducing apparatus inherently discloses an enclosure having and opening and light emitting device inside the enclosure as evident by the LED(68) located on top of the voice recording and reproducing device(51) - (figure 11 – col. 8,

lines 52-60), and the apparatus comprises a microphone (31a) which includes voice sensitivity characteristics for voice activated recording (col. 6, lines 50-54 and 57-59), wherein it would be inherent that the light is visible only by the user of the microphone as evident that the LED indicates that the apparatus in the recording mode.

Regarding claim 5, Terui discloses everything claimed as applied above (see claim 1). Terui enclosure is cylindrical as evident by the circular representation of the LED in the opening (figure 11).

6. Claims 1, 8, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Mills, U. S. Patent No. 5805717.

Regarding claim 1, Mills discloses a light sensitive switch with microphone. Mills' disclosure comprises a microphone system including a microphone (44) within an enclosure, wherein it is inherent that enclosure comprises an opening with a light emitting device as evident by the a LED (28), which is located in the microphone system (col. 1, lines 60-62, col. 2, lines 8-12), wherein the light from the LED is visible to the user when in use (col. 2, lines 49-53), which provides support of the light emitted through the opening is only visible to the a speaker when the speaker's mouth is within a sensitive region of the a microphone.

Regarding claims 8 and 11, Mills discloses a light sensitive switch with microphone. Mills' disclosure comprises a microphone system including a microphone (44) within an enclosure, wherein it is inherent that enclosure comprises an opening to a cavity with a light emitting device as evident by the a LED (28) which isolated from the microphone components, which is located in the microphone system (col. 1, lines 38-41, and 60-62, col. 2, lines 8-12), wherein the LED is a the bottom of the cavity (see figure 1) and further it is inherent that the

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LED may comprise a cover as evident by the fact that it is isolated from the microphone, and thus, the light from the LED is visible to the user when in use (col. 2, lines 49-53), which provides support of the light emitted through the opening is only visible to the a speaker when the speaker's mouth is within a sensitive region of the a microphone.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 12-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Mills.

Regarding claim 12, AAPA disclose a microphone having a sensitivity region. And, Mills discloses a LED for emitting light to specifically to the user when in use. However, AAPA and Mills fails to specifically disclose the microphone having a plug for coupling, and having a LED. A microphone having a plug and the use of LEDs are common features of a microphone. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA and Mills by providing a plug comprising a LED for the purpose emitting a visual indication the user about the function of the microphone as indicated by Mills.

Regarding claim 13, AAPA and Mills discloses everything claimed as applied above (see claim 12). AAPA and Mills (AAPA) discloses a microphone array.

Regarding claim 14, AAPA and Mills discloses everything claimed as applied above (see claim 12). AAPA and Mills (AAPA) discloses a microphone array. However, AAPA and Mills fail to disclose a time delay estimation. The examiner takes official notice time delay estimation was well known. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA and Mills by incorporating time delay estimation for the purpose of adequately determining the time need to effectively process a plurality of microphones, wherein the arrival time of signal to each microphone differs.

Regarding claim 21, AAPA and Mills discloses everything claimed as applied above (see claim 12). AAPA and Mills (Mills) disclose a video camera that receives an input via a LED switch to control the direction of the camera to the user of the microphone.

Regarding claims 20 and 22, AAPA and Mills discloses everything claimed as applied above (see claim 12). AAPA and Mills (AAPA) discloses a computer and use of the microphone in the automobile.

Regarding claims 15-19, AAPA and Mills discloses everything claimed as applied above (see claim 12). AAPA and Mills fail to disclose a speech recognition application, a speaker verification application, a conferencing application, a telephony application, and/or a tablet coupled to the microphone (herein, microphone applications). The examiner takes official notice that such microphone applications were well known in the art. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of AAPA and Mills by incorporating such various microphone applications for the purpose implementing various and diverse convenient ways of using the microphone for communication purposes.

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9. Claims 2-4, 6-7, 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


10. Claims 23-25 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura A. Grier
December 13, 2004